



HEALTHIER LIVES THROUGH SCIENTIFIC DISCOVERY IN FOOD, NUTRITION, AND DIET

Foods for Health

2016 FFH Seed Grant Recipients -Total Research Investment \$125,000

Project	Team	Amount
Untargeted and targeted metabolomics approaches to determine hepatic anti-inflammatory activities of green tea in nonalcoholic steatohepatitis	Rich Bruno (PI) (EHE), Rachel Kopec (Co-PI) (EHE), Ken Riedl (CFAES), Morgan Cichon (CFAES)	\$25,000
Metabolomics discovery to identify determinants of adipose tissue inflammation in obesity	Willa Hsueh (PI) (COM), Arpad Somogy (CCIC), Vicki Wysocki (CAS),	\$25,000
Effects of dietary sphingomyelin on neonatal piglet intestinal health and membrane composition	Sheila Jacobi (PI)(CFAES), Rafael Jimenez-Flores (Co-PI) (CFAES), Morgan Cichon (CFAES)	\$25,000
The impact of metabolic syndrome on fat soluble vitamin uptake	Rachel Kopec (PI) (EHE), Rich Bruno (Co-PI) (EHE)	\$25,000
Metabolome-based genome-wide association study of innate immunity in rice	Guo-Liang Wang (PI)(CFAES), Josh Blakeslee (Co-PI) (CFAES)	\$25,000

2017 FFH Seed Grant Recipients- Total Research Investment \$125,000

Project	Team	Amount
Impacts of Salmonella infection on the chemical and biological landscape of the gut	Brian Ahmer (PI)(COM), Vicki Wysocki (Co-PI) (CAS), Kelly Wrighton (CAS)	\$25,000
Metabolomic and Transcriptional Responses to Diets Containing Red or Tangerine Tomatoes	David Francis (PI) (CFAES), Steven Clinton (Co-PI) (COM), Jessica Cooperstone (CFAES)	\$25,000
The Effects of Dietary Modification on the Brain Lipidome after Chemotherapy	Tonya Orchard (PI) (EHE), Rachel Kopec (Co-PI) (EHE), A. Courtney DeVries (COM)	\$25,000
Using targeted and broad-spectrum metabolomics to identify metabolism-based changes leading to decreased meat quality in fast growing turkeys	Sandra Velleman (PI) (CFAES), Daniel Clark (Co-PI) (CFAES), Josh Blakeslee (CFAES)	\$25,000
Functional Foods and Oral Cancer Prevention: Hybrid NMR-MS Metabolic Signature of Experimental Oral Carcinogenesis and Black Raspberry Chemoprevention	Chris Weghorst (PI) (COPH), Thomas Knobloch (COPH), Steve Oghumu (COM) Rafael Bruschweiler(CAS), Arpad Somogy (CCIC)	\$25,000

2018 FFH Seed Grant Recipients – Total Research Investment \$125,000

Project	Team	Amount
Metabolomic Signature of Beef Consumption in the Context of a Healthy Dietary Pattern in Cancer Survivors	Steven Clinton (PI)(COM), Colleen Spees (Co-PI) (COM), Eric England (CFAES), Rishi Jain (COM), Liz Grainger (COM), Jennifer Thomas-Ahner (COM), Greg Young (CB)	\$25,000
Linking apple genomics and metabolomics for nutrition-driven germplasm improvement	Jessica Cooperstone (PI) (CFAES), Jonathan Fresnedo Ramirez (CFAES), Emmanuel Hatzakis (CFAES), Diane Miller (CFAES)	\$25,000
From agricultural waste products to colon health: Producing prebiotics from apple pomace.	Emmanuel Hatzakis (PI) (CFAES), Michael Bailey (Co-PI) (COM), Josh Blakeslee (CFAES)	\$25,000

Effects of rotaviral infections and probiotic bacteria on host metabolome	Gireesh Rajashekara (PI) (CFAES), Anastasia Vlasova (Co-PI) (CFAES), Linda Saif (CFAES), Vicki Wysocki (CAS), Arpad Somogyi (CCIC)	\$25,000
Metabolomic and Microbial Factors of Postpartum Weight Retention	Matthias Klein (PI) (CFAES), Lisa Christian (Co-PI) (COM)	\$25,000

2019 FFH Seed Grant Recipients – Total Research Investment \$50,000

Project	Team	Amount
Food products for the targeted enrichment of gut microbes	Jiangjiang 'Chris' Zhu (PI) (EHE), Dan Spakowicz (COM), Yael Vodovotz (CFAES), Qin Ma (COM)	\$25,000
Inhibition of Allergic Contact Dermatitis by Black Raspberry Phytochemicals: Mechanisms and Applications	Steve Oghumu (PI) (COM), Jessica Cooperstone (Co-PI) (CFAES)	\$25,000

2021 FFH Seed Grant Recipients – Total Research Investment \$170,000

Project	Team	Amount
Machine Learning and AI to Advance Whole Wheat Acceptance	Xia Ning (PI) (COM/COE), Chris Simons (CFAES), Devin Peterson (CFAES)	\$20,000
Dietary Approach to Improve Human Muscle Mitochondrial Function	Kedryn Baskin (PI) (COM), David Arnold (COM), Martha Belury (EHE)	\$50,000
Investigating the Role of Diet Quality and Nutritional Status in Chemotherapy-Related Cognitive Impairment in Breast Cancer Survivors	Tonya Orchard (PI) (EHE), Stephanie Gorka (COM), Lei Wang (COM), Maryam Lustberg (COM), Nicole Williams (COM), Patrick Snell (CPH), Rachel Kopec (EHE)	\$50,000
Development of Affordable Artificial Intelligence-Enhanced Automation to Increase Reproducibility of Multi-Omic Workflows	Rachel Kopec (PI) (EHE), Raghu Machiraju (COE/COM)	\$50,000

2022 FFH Seed Grant Recipients – Total Research Investment \$160,000

Project	Team	Amount
Diet Quality and Biologic Aging in Breast Cancer Survivors: A Prospective Study	Janice Kiecolt-Glaser (PI) (COM), Christin Burd (CAS), Rebecca Andridge (COPH), Martha Belury (EHE)	\$20,000
A soy-tomato dietary intervention to reduce inflammatory eosinophils	Thomas Mace (PI) (COM), Jessica Cooperstone (CFAES), Phil Hart (COM)	\$20,000
Cognitive and Anti-Inflammatory Benefits of Anthocyanins and Prebiotic Polysaccharides along the Gut-Brain Axis	Cole Vonder Haar (PI) (COM), Yael Vodovotz (CFAES), Richard Bruno (EHE)	\$20,000
Gut Microbiota Modulate Intestinal Endogenous Opioid Signaling to Promote Food Pleasure	Lihua Ye (PI) (COM), Devin Peterson (CFAES), Jiangjiang 'Chris' Zhu (EHE)	\$50,000
Multimiomics and Advanced Modeling Approaches to Identify Microbiome-Mediated Mechanisms of Cardiometabolic Health of Child-Parent Dyads Enrolled in an Intensive Lifestyle Intervention Trial	Jiangjiang 'Chris' Zhu (PI) (EHE), Michael Baily (PI)(COM), Colleen Spees (COM), Kelly Kelleher (NCH), Amrik Khalsa (NCH), Ross M. Maltz (NCH), Brett Lohman (UIUC)	\$50,000

2023 FFH Seed Grant Recipients – Total Research Investment \$180,000

Project	Team	Amount
Bioactive Phytochemical Enhancement in Arugula Using Hydroponic Production Methods	Jessica Cooperstone (PI) (CFAES), Chieri Kabota (CFAES), Aaron Wiedemer (CFAES)	\$50,000
Adipocyte Extracellular Vesicles Promote Atherosclerosis in Obesity	Willa Hsueh (PI) (COM), Eduardo Reátegui (COE)	\$50,000
Dietary Impact on Phagocytic & Mitochondrial Function of Brain Cells From Young Adult and Aged Rats	Ruth Barrientos (PI) (COM), Kedryn Baskin (COM)	\$40,000
Taste and Tactile Underpinnings of Picky Eating	Chris Simons (PI) (CFAES), Praveen Goday (NCH)	\$40,000

2024 FFH Seed Grant Recipients – Total Research Investment \$150,000

Project	Team	Amount
Enhancing the nutritional and processing potential of cereal fibers: Refining physicochemical properties and unravelling structure-function relationships to promote gut health.	Emmanuel Chatzakis (PI) (CFAES), Osvaldo Campanella (CFAES), Chris Simons (CFAES)	\$50,000
Spinal cord injury disrupts bile acid production and metabolism	Dana McTigue (PI) (COM), Phil Popovich (COM), Rich Bruno (EHE), Jiangjiang 'Chris' Zhu (EHE)	\$50,000
Impact of Dietary Lipids on Lynch Syndrome Associated Colorectal Cancer	Maria Mihaylova (COM), Holli Loomans-Kropp (COM), Steven Clinton (COM)	\$50,000